



# Czech-Slovak-Hungarian-Romanian Market Coupling go-live in Q4/2014

As a result of the 5M Market Coupling Project decision from August 2013 to start implementation of the market coupling involving the Czech, Slovak, Hungarian and Romanian day-ahead electricity markets the 4M Market Coupling (4M MC) Project has started to work. Recently the 4M MC Steering Committee approved the latest development and welcomed the full commitment of all involved parties. The Steering Committee further acknowledged the progress achieved by the project team and appreciated that all parties had advanced significantly in assessment of the required technical solutions and common interfaces and started the preparation for implementation of all systems.

In January 2014, 4M MC Power Exchanges successfully concluded the necessary preliminary steps to be ready to start the implementation of the Price Coupling of Regions (PCR) solution into their IT infrastructure aiming to become fully compatible with the IEM target model. This is a crucial stage, in order to achieve the overall EU target of a harmonised European day-ahead electricity market. While OTE has become a Full PCR Member since March 2013, HUPX, OPCOM and OKTE have finished all needed procurement procedures and selected their Service Provider for the PCR solution. PCR is the initiative of seven European Power Exchanges, which provides a single price coupling solution to be used to calculate electricity prices across Europe, and allocate cross-border capacity on a day-ahead basis.

The 4M MC Transmission System Operators agreed on the TSO Management Function (mTMF) system architecture. mTMF delivers efficient management of all common TSO duties and operates a common TSO-PX communication interface. Once in operation, the mTMF will represent a universal platform promoting cross-regional market integration that will be open to be extended towards other markets.

Based on the project progress, the Steering Committee approved the plan to go-live of the 4M MC before the end of the year 2014 in order to promote the benefits of the interconnected markets to their participants as soon as possible. 4M MC Project is expected to increase liquidity, efficiency, and social welfare in the coupled markets.

As agreed in August by the 5M Market Coupling Steering Committee, the Polish Parties (PX (TGE), TSO (PSE) and NRA (URE)) have the observer status in the 4M MC Project in order to be fully informed about the extension activities allowing future smooth integration.

The involved parties will inform regularly about further progress of the 4M Market Coupling Project.

















# **Background information:**

## **HUPX – Hungarian Power Exchange Ltd.**

MAVIR Ltd. established its 100% owned subsidiary, HUPX Hungarian Power Exchange Ltd., on 9th May, 2007. Having met the requirements set in Decision No. 794/2008 of the Hungarian Energy Office, MAVIR Ltd. submitted documentation concerning the license application for the establishment and operation of the organized electricity market on 11th September, 2008 through its subsidiary, HUPX Hungarian Power Exchange Ltd. In its Decision No. 136/2009 dated 9th April, 2009, the Hungarian Energy Office issued the license for the operation of the organized electricity market for 10 years to HUPX Hungarian Power Exchange Ltd. HUPX has started its day-ahead market operation on 20th July, 2010. HUPX launched its physical futures market on 19th July, 2011.

Since its start (2010 July), the total traded volume on HUPX Markets was more than 35 TWh. The total traded volume was 16.2 TWh in 2013, which is almost 40% of the Hungarian consumption. For further information, please visit www.hupx.hu.

### MAVIR – the Manager of Power

MAVIR Magyar Villamosenergia-ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság [MAVIR Hungarian Independent Transmission Operator Company Ltd., MAVIR ZRt.] is a young organization with great traditions and vast experience. Nevertheless, tradition, experience and youth in this case are not contradictory: before the establishment of MAVIR, the National Power Dispatch Centre had been performing the technical tasks of system operation since November 1949. By creation of the integrated transmission system operator (TSO) on 1st January, 2006 the transmission system operator incorporated the Division for Network Operation from National Power Line Company Ltd. and Division for Transmission Network from Hungarian Power Companies Ltd. A highly skilled team of experts, who love their profession and pursue it on a high level, have joined MAVIR ZRt., which is more than the old dispatch centre: today MAVIR ZRt.'s duties are as follows:

- to provide the reliable, efficient and secure operation of the Hungarian Power System including the required reserve capacities of generation and transmission;
- to supervise and scale up the assets of the transmission system, to perform any renewal, maintenance and development works required for a proper and reliable supply;
- to ensure the undisturbed operation and further extension of the electricity market and access on equal terms for system users;
- to process the data received from the participants of electricity supply;
- to inform the market players in order to prevent the conclusion of unfeasible contracts;
- to harmonise the operation of the Hungarian Power System with the neighbouring systems;
- to coordinate international co-operations;
- to prepare the Network Development Strategy and to put forward proposals for the development of the generation pool.

Based on certification included in the Decision of Hungarian Energy Office dated of 13 March 2012, MAVIR is operating in accordance with ITO (Independent Transmission Operator) model; thereby MAVIR is the owner and operator of the transmission network within a vertically integrated electricity corporation. For further information, please visit www.mavir.hu.

# MEKH (HEA)

The Hungarian Energy and Public Utility Regulatory Authority is a national public administration body with independent powers and competence, acting under the Hungarian Parliament. The tasks of the Authority are specified in the act on HEA, the act on natural gas supply, as well as in the acts on electricity, district heating and water public utility supply. Concerning the extension of the CZ-SK-HU market coupling project (5M MC), according to the provisions of the acts, the main responsibilities of the Authority are the followings:



















- approves the general terms of electric energy market (Commercial Code prepared by MAVIR, Market Rules of HUPX), as well as the business codes of the license holders
- determines the sphere of information to be disclosed,
- investigates customer complaints.

Additional information is available on www.mekh.hu.

## OTE, a.s.

OTE, a.s., the Czech electricity and gas market operator, (OTE) is a joint stock company established in 2001. OTE provides comprehensive services to individual electricity and gas market players in the Czech Republic. OTE started to organize trading in the day-ahead electricity market in 2002 and the intra-day and block electricity markets in later years. OTE has been the market operator on the gas market since 2010 including operation of day-ahead gas market and intraday gas market. Continuous data processing and exchange required for the accounting and settlement of imbalance between the contractual and actual volumes of electricity and gas supplied and received are among services offered by the OTE to players in the Czech electricity and gas markets, as well as administrative procedures associated with a switch of supplier. The OTE also administers the National Register of Greenhouse Gas Emissions. OTE is the holder of the license for market operator's activities, which includes activities in the electricity and gas market in the Czech Republic.

Additional information is available on www.ote-cr.cz.

## ČEPS, a.s.

ČEPS, a joint stock company, is the sole Czech Transmission System Operator and holds an exclusive license to that effect granted by the Energy Regulatory Office under the Energy Act.

The Company is responsible for the maintenance and upgrading of 41 substations comprising 71 transformers, which allow electricity to be supplied from the transmission system to the distribution network, as well as 400kV lines with a total length of 3508km and 220kV lines with a total length of 1910km.

ČEPS is a member of relevant European international organisations. The Company is responsible for maintaining the balance of electricity supply and demand within the Czech power system in real time (system services) and for organising cross-border power exchanges including transits.

ČEPS has traditionally been closely involved in the creation of liberalised electricity markets both in the Czech Republic and Europe. Additional information is available on www.ceps.cz.

### ERÚ

The Energy Regulatory Office ('ERÚ') was established on 1st January 2001 by Act No. 458/2000 of 28th November, 2000, on the Conditions of Business and State Administration in the Energy Industries and Changes to Certain Laws ('the Energy Act") as amended, as an administrative authority for regulation in the energy sector in the Czech Republic. The ERÚ is mainly responsible for support for competition on energy market, support for the use of renewable energy resources and protection of consumer interests in the areas of energy industries, in which competition is not feasible.

Additional information is available on www.eru.cz.

# OKTE, a.s.

OKTE, a.s. is the Short Term Day-Ahead Market Organizer in the Slovak Republic. OKTE, a.s. was registered as an independent legal entity on 11th August, 2010. The main business of the company is regulated and selected types of services provided are subject to price regulation by Office for Regulation of Network Industries. Organization of Short Term Daily Market operates according to the Operating Order of OKTE, a.s. The organized short term daily market allows the market participants to offer or request electricity, to increase the option of having a balanced business position before the supply/off-take a decrease the probability of having a differences between planned and real value of supply/off-take of















electricity. Other responsibility of OKTE, a.s. are settlement of imbalance, collection, management and disclosure of measured data and the central invoicing of fees related to the operation of the system and related activities for the subjects of settlement in the Slovak Republic. OKTE, a.s. is also the holder of the license for market operator's activities.

Additional information is available on www.okte.sk.

# Slovenská elektrizačná prenosová sústava, a. s.

Since 21th January, 2002 the company Slovenská elektrizačná prenosová sústava, a.s. operates transmission system in the Slovak Republic as an independent legal entity. Mission of the Company is to reliably operate the transmission system, ensure dispatching control of the system, its maintenance, renewal and development to ensure a sustainable and high quality supply of electricity to all users of the transmission system and its parallel operations with adjacent transmission systems. At the same time, it is essential for the Company to adhere to transparent and non-discriminatory principles of accessing the network with a minimum impact on the environment. It is also essential to respect the requirements proceeding from the national and EU legislation, national regulatory authority's decisions, pertinent rules for operations and international co-operation within the synchronized inter-connected electricity network of EU. Additional information is available on www.sepsas.sk.

### **URSO**

The Regulatory Office for Network Industries is a state administrative authority established in 2001. The Office fulfils the function of the regulatory body, together with the Regulatory Board, in the field of electricity, gas, heating and water management sectors. The aim is to create and support the competitivelike environment, to protect both the consumers and the interests of licence holders, to achieve reasonable return rates on investments, and to provide for reliable, economic and good quality supplies of goods and services related to regulated sectors. Additional information is available on www.urso.gov.sk.

## **OPCOM SA**

The Romanian Electricity and Gas Market Operator - OPCOM SA was established in 2000 as a joint stock company and subsidiary of CNTEE Transelectrica SA. The responsibilities derive from its role as organizer and administrator of the centralized electricity and gas markets and settlement operator in the wholesale electricity market according to in force ANRE regulations and Conditions of the Licenses no. 407 and 1798. Main activities deployed by OPCOM are the following: spot trading of the electricity in the day-ahead market (DAM) and intraday market (IDM); term contracting through the centralized market for electricity bilateral contracts (CMBC and CMBC-CN); environmental certificates trading on the green certificates market as well as on the trading platform for greenhouse gases emission certificates; settlement of the transactions concluded on Day-Ahead Market, Intraday Market and Centralized Green Certificates Market; settlement of the electricity transactions concluded on the Balancing Market organized by CNTEE Transelectrica SA and the Imbalances of the Balancing Responsible Parties; market surveillance and reporting to ANRE; providing relevant information to market participants, mass-media and general public. In 2013 OPCOM was licensed for performing the administration activities of the centralized gas markets.

Additional information is available on www.opcom.ro.

#### Transelectrica

Transelectrica was founded by the Government Ordinance No. 627/July, 31, 2000 further to unbundling the former Romanian Electricity Authority (CONEL).

Transelectrica is the Romanian Transmission and System Operator (TSO), which plays a key role in the Romanian electricity market.

It manages and operates the electricity transmission system and provides the electricity exchanges between the central and eastern European countries as an ENTSO-E member (European Network of Transmission and System Operators for Electricity).

















Transelectrica is responsible for electricity transmission, system and market operation, grid and market infrastructure development ensuring the security of the Romanian power system. It also serves as the main link between electricity supply and demand, matching all the times power generation with demand, acting as the Balancing market operator.

Since 29 August 2006, Transelectrica is listed to the Bucharest Stock Exchange.

Mission: Transelectrica ensures the Romanian Power System (RPS) reliable and stable operation at quality standards, while providing the national electricity transmission network under transparent, nondiscriminatory and fair conditions to all market participants; www.transelectrica.ro.

#### **ANRE**

Romanian Energy Regulatory Authority was established in 1999. It is organised as an autonomous administrative authority with legal personality and own patrimony, under Parliamentary control, entirely self-financed and independent as regards its decision-making process, organisation and functioning. ANRE issues, approves and monitors the implementation of the national-wide binding regulatory framework required for the proper functioning of the electricity, heat and natural gas sectors and markets in terms of efficiency, competition, transparency and consumer protection. Electricity and Gas Law no. 123/2012 stipulate the responsibilities and competences of ANRE. Additional information is available on ANRE's website: www.anre.ro.

#### **PCR**

Price Coupling of Regions (PCR) is the initiative of the seven European Power Exchanges (APX, Belpex, EPEX SPOT, GME, Nord Pool Spot, OMIE and OTE), which provides a single price coupling solution to be used to calculate electricity prices across Europe, and allocate cross-border capacity on a day-ahead basis.

#### **mTMF**

TSO Management Function (mTMF) system delivers efficient management of all common TSO duties and operates a common TSO-PX communication interface. Once in operation, the mTMF will represent a universal platform promoting cross-regional market integration that will be simply extendable open to be extended towards other markets.